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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,494	10/16/2001	Andrew W. Wilks	M-11748 US	4824

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EXAMINER

CONNOLLY, MARK A

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/978,494

Applicant(s)

WILKS ET AL.

Examiner

Mark Connolly

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-22 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 10 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-14-02</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-27 have been presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3, 5, 9, 11-16, 18, 22 and 24-27 are rejected under 35 U.S.C. 102(a) as being anticipated by Chan US Pub No 2002/0194394.
4. Referring to claim 1, Chan teaches the invention substantially including:
  - a. executing a boot device driver program, the boot device driver program being executed by the boot operating system of the computer system to configure a RAM disk [abstract and ¶ 0127]. Setting up the Ramdisk is interpreted as configuring it.
  - b. copying contents of a boot sector of the removable medium to the RAM disk using the boot device driver program [abstract and ¶ 0127].
  - c. modifying the boot operating system using the boot device driver program to redirect the boot media I/O to the RAM disk, the modified boot operating system enabling the removal of the removable medium [¶s 0127-0128]. Executing the image on the Ramdisk which was copied from the CD is interpreted as redirecting the I/O to read from the Ramdisk rather than the CD.
5. Referring to claim 2, Chan teaches that the removable medium is an optical disk [¶ 0127].

Art Unit: 2115

6. Referring to claim 3, Chan teaches that the Ramdisk emulates a hard disk [¶ 0128]. A rewritable fixed disk is interpreted as a hard disk.
7. Referring to claim 5, because the Ramdisk acts as the storage medium which the operating system is executed from, it is interpreted that the Ramdisk operates as a backing store. Furthermore because the removable medium can be removed, it is interpreted that the medium is unlocked.
8. Referring to claim 9, Chan teaches that the booting CD can be removed and replaced [¶ 0128].
9. Referring to claim 11, Chan teaches that the devices are relabeled [¶ 0088]. Re-labeling the drives is interpreted as modifying a device manager.
10. Referring to claim 12, Chan teaches altering the directory used to locate files due to running the system from the Ramdisk [¶ 0042-0043, 0045 and 0068].
11. Referring to claim 13, because the data on the CD image configures the Ramdisk and loads the operating system, it is interpreted that the operating system and boot device driver program are embedded within the image.
12. Referring to claims 14-16, 18, 22 and 24-27, these are rejected on the same basis as set forth hereinabove. Chan teaches the method and therefore teach the system performing the method.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2115

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6-8 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan as applied to claims 1-3, 5, 9, 11-16, 18, 22 and 24-27 above.

15. Referring to claims 6 and 7, because the Chan system already uses Windows 95/98 and ME, it would have been obvious to modify the Chan system to use Windows NT/2000 or XP because these are just newer versions of the windows operating system. Furthermore, it is well known that these are 32-bit operating systems.

16. Referring to claim 8, although Chan does not explicitly teach determining the size of an emulated hard disk defined by a boot sector size and configuring the size of the Ramdisk prior to copying the image, it is explicitly taught that the Ramdisk must be "capable of holding the running image of the operating system in computer system(s) or device(s) with *sufficient RAM*" for the operating system to run [¶ 0026 emphasis added]. Therefore it would have been obvious to one of ordinary skill in the art to determine the size required for the Ramdisk and allocating a space with the determined size requirement so that when the image is copied to the Ramdisk, it will be assured that the Ramdisk will have enough space for the received image data.

17. Referring to claims 19-21, these are rejected on the same basis as set forth hereinabove. Chan teaches the method and therefore teaches the system performing the method.

18. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan as applied to claims 1-3, 5, 9, 11-16, 18, 22 and 24-27 above, and further in view of Applicants Admitted Prior Art [AAPA].

Art Unit: 2115

19. Referring to claim 4, Chan teaches a means to execute an operating system from a source other than the hard drive by storing an image from a CD to a Ramdisk and then enabling the CD to be removed from the system. In summary, Chan teaches using the Ramdisk as a backing store and having the CD unlocked. The AAPA explicitly teaches another means to execute an operating system from a source other than the hard drive. In particular, the AAPA teaches that the CD can be used as the backing store [page 3 lines 27-30]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Chan system to further enable the CD to operate as the backing store because, even though the system would experience a reduction in speed, using the CD as a backing store would reduce the amount of memory required for the Ramdisk. Additionally, the AAPA teaches that when using the CD as a backing store, the CD needs to be locked to prevent memory page faults [page 3 lines 27-30].

20. Referring to claim 17, this is rejected on the same basis as set forth hereinabove. Chan and AAPA teach the method and therefore teach the system performing the method.

#### ***Allowable Subject Matter***

21. Claims 10 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (571) 272-3666. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).

Art Unit: 2115

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Connolly  
Examiner  
Art Unit 2115

*Dennis M. Butler*  
**Dennis M. Butler**  
**Primary Examiner**

mc  
October 27, 2004